

II. In the claims:

Please cancel pending claims 1-10 and replace them with the following new claims 11-40:

1. (Cancel) A computer system comprising:
 - an asynchronous messaging-and-queuing system; and
 - a storage area network having a storage area network controller; and
 - wherein said storage area network controller comprises control means to control a message queue on behalf of one or more queue managers.
2. (Cancel) A computer system as claimed in claim 1, wherein said one or more queue managers comprise two or more queue managers, and at least two of said two or more queue managers are heterogeneous.
3. (Cancel) A computer system as claimed in claim 1 or claim 2, wherein a message in said message queue is persistent, and wherein said storage area network controller comprises means for controlling persistence of said message.
4. (Cancel) A computer system as claimed in any preceding claim, wherein said message is a transactional message, and wherein said storage area network controller comprises transactional control means.
5. (Cancel) A computer system as claimed in claim 4, wherein said transactional control means comprises a syncpoint coordinator.
6. (Cancel) A method for controlling a computer system having an asynchronous messaging-and-queuing system and a storage area network having a storage area network controller; comprising the steps of:
 - receiving a message request at a queue manager; and
 - passing said message request to said storage area network controller; wherein said storage area network controller comprises control means to control message queues on behalf of one or more queue managers.

7. (Cancel) A method as claimed in claim 6, wherein said one or more queue managers comprise two or more queue managers, and said two or more queue managers are heterogeneous.
8. (Cancel) A method as claimed in claim 6 or claim 7, wherein a message in said message queue is persistent, and wherein said storage area network controller comprises means for controlling persistence of said message.
9. (Cancel) A method as claimed in any of claims 6 to 8, wherein said message is a transactional message, and wherein said storage area network controller comprises transactional control means.
10. (Cancel) A computer program comprising computer program code to, when loaded into a computer system and executed, cause said computer system to perform all the steps of a method as claimed in any of claims 7 to 9.
11. (New) A computer system comprising:
 - an asynchronous message and queue system;
 - a storage area network controller in communication with said asynchronous message and queue system;
 - said storage area network controller having control means adapted to control a message queue on behalf of a queue manager; and
 - said storage area network controller adapted to control a message selected from a group consisting of: transactional and persistent.
12. (New) The system of claim 11, wherein said queue is adapted to support simultaneous access by a first queue manager and a second queue manager.
13. (New) The system of claim 11, further comprising a connection handle adapted to be authorized by said controller and returned to a call request to connect an application with said queue manager.

14. (New) The system of claim 13, further comprising a counter adapted to track a quantity of handles authorized for said queue.

15. (New) The system of claim 13, further comprising an object handle adapted to be dispensed by said queue manager for use in performance of a service to an object.

16. (New) The system of claim 15, wherein said object handle and said connection handle function as input parameters to a call request.

17. (New) The system of claim 11, wherein said transactional message control is in the form of a syncpoint coordinator.

18. (New) The system of claim 11, wherein said storage area network controller includes a lock manager adapted to preserve data integrity.

19. (New) A method for communicating in a computer system comprising:
managing a queue in a storage area network of said computer system
supporting an asynchronous messaging and queuing system;
receiving a message request at a queue manager of said storage area network;
and
passing said received message request to a storage area network controller of said storage area network, wherein said controller includes means to control a message selected from a group consisting of: transactional and persistent.

20. (New) The method of claim 19, further comprising supporting simultaneous access to said queue by a first queue manager and a second queue manager.

21. (New) The method of claim 19, wherein the step of managing a queue in a storage area network includes authorizing a connection handle to a call request from said queue manager.

22. (New) The method of claim 21, further comprising tracking a quantity of authorized connection handles for said queue.

23. (New) The method of claim 21, wherein the step of managing a queue in a storage area network includes dispensing an object handle by said queue manager for performance of a service to an object.

24. (New) The method of claim 19, wherein said transaction message control means utilizes a syncpoint coordinator.

25. (New) The method of claim 19, wherein the step of managing a queue in a storage area network includes preserving data integrity.

26. (New) An article comprising:
a computer-readable signal-bearing medium;
means in the medium for managing a queue in a storage area network of an asynchronous messaging and queuing system;
means in the medium for receiving a message request at a queue manager of a storage area network; and
means in the medium for passing said message request to a storage area network controller of said storage area network, wherein said controller includes means for controlling a message selected from a group consisting of: transactional and persistent.

27. (New) The article of claim 26, further comprising means in the medium for supporting simultaneous access to said queue by a first queue manager and a second queue manager.

28. (New) The article of claim 26, wherein said means for managing a queue in a storage area network includes means for authorizing a connection handle to a call request from said queue manager.

29. (New) The article of claim 28, further comprising means in the medium for tracking a quantity of authorized connection handles for said queue.

30. (New) The article of claim 28, wherein said means for managing a queue in a storage area network includes means for dispensing an object handle by one of said queue managers for performance of a service to an object.

31. (New) The article of claim 26, wherein said transactional message control means includes a syncpoint coordinator.

32. (New) The article of claim 26, wherein said means for managing a queue in a storage area network includes preserving data integrity.

33. (New) An asynchronous message-and-queue system comprising:
a storage area network having a controller adapted to control a queue in said storage area network; and
said storage area network controller having means adapted to control a message selected from a group consisting of: transactional and persistent.

34. (New) The system of claim 33, wherein said transactional message control means includes a syncpoint coordinator.

35. (New) The system of claim 33, wherein said controller includes a lock manager adapted to preserve data integrity.

36. (New) The system of claim 33, wherein controller includes a first queue manager and a second queue manager to manage said queue, and wherein said queue managers are heterogenous.

37. (New) A method for messaging comprising:
managing a queue in a controller of a storage area network of an asynchronous messaging and queuing system; and
controlling a message in said queue, wherein said message is selected from a

group consisting of: transactional and persistent.

38. (New) The method of claim 37, wherein the step of controlling a transactional message includes a syncpoint coordinator.
39. (New) The method of claim 37, wherein the step of managing a queue in a storage area network includes tracking a quantity of connection handles authorized for said queue.
40. (New) An article comprising:
a computer-readable signal-bearing medium;
means in the medium for managing a queue in a storage area network of an asynchronous messaging and queuing system; and
means in the medium for controlling a message in said queue, wherein said messaging is selected from a group consisting of: transactional and persistent.